

We claim:

1. An image capturing device, comprising:
an electronic image sensor;
a memory including a motion detect routine, a predetermined image interval,
and at least one predetermined motion threshold; and
a processor communicating with said electronic image sensor, said shutter button, and said memory, with said processor conducting the capturing of images separated by said predetermined image interval, comparing a current image to one or more previous images, determining when motion between said current image and said previous image is below said at least one predetermined motion threshold, and storing said current image as a final image.
2. The image capturing device of claim 1, said memory further including a predetermined sampling pattern of pixels to be sampled in a captured image and wherein a comparison is performed on pixels included in said predetermined sampling pattern.
3. The image capturing device of claim 1, said memory further including a main object specifying a main object in said images and wherein a comparison of said main object is performed between said current image and said previous image.

4. The image capturing device of claim 1, said memory further including a number of regions data dividing a captured image into a plurality of image regions and wherein a region-by-region comparison is performed between said two successive images.

5. The image capturing device of claim 1, said memory further including a motion detect variable, wherein a motion detection is performed when said motion detect variable is set to an enable state.

6. The image capturing device of claim 1, wherein said predetermined motion threshold is user-settable.

7. The image capturing device of claim 1, wherein said processor stores said current image as said final image when said current image is determined to be stable.

8. The image capturing device of claim 1, wherein said processor stores said current image as said final image when said current image is determined to be stable and a shutter button press is detected.

9. The image capturing device of claim 1, said memory further including a hold timeout timer that stores a predetermined hold timeout period and wherein said current image is stored as a final image if said hold timeout timer expires.

10. An image capturing method, comprising the steps of:
 detecting a shutter button press in order to initiate the image capturing method;
 capturing a previous image;
 capturing a current image;
 comparing said current image and one or more previous images;
 determining if said current image is stable with regard to motion; and
 converting said current image to be said previous image and repeating the step of capturing a new image as said current image and repeating the steps of comparing and determining if said current image is not stable;
 wherein the step of capturing a current image and the steps of comparing and determining are repeated until said current image is determined to be stable.
11. The method of claim 10, further comprising the step of storing said current image as a final image when said current image is determined to be stable.
12. The method of claim 10, further comprising the step of checking a hold timeout timer and storing said current image as a final image upon expiration of said hold timeout timer.
13. The method of claim 10, further comprising the step of waiting a predetermined image interval between image captures.
14. The method of claim 10, further comprising the step of storing said current image as a final image when said current image is determined to be stable.

15. The method of claim 10, wherein the step of comparing compares all pixels in said current image and in said previous image.

16. The method of claim 10, wherein the step of comparing compares a predetermined sampling pattern of pixels in said current image and in said previous image.

17. The method of claim 10, wherein the step of comparing compares a predetermined region in said current image and in said previous image.

18. The method of claim 10, wherein the step of comparing compares a user-designated region in said current image and in said previous image.

19. The method of claim 10, wherein the step of comparing compares a user-designated object in said current image and in said previous image.

20. The method of claim 10, wherein the step of comparing compares a plurality of regions in said current image to a corresponding plurality of regions in said previous image, and wherein said current image is determined to be stable when all regions in said plurality of image regions are determined to be stable.

21. An image capturing method, comprising the steps of:

capturing a previous image;

capturing a current image;

comparing said current image and one or more previous images;

determining if said current image is stable with regard to motion;

converting said current image to be said previous image and repeating the step of capturing a new image as said current image and repeating the steps of comparing and determining if said current image is not stable; and

detecting a shutter button press when said current image is stable;

wherein the step of capturing a current image and the steps of comparing and determining are repeated until said current image is determined to be stable.

22. The method of claim 21, wherein said current image is stored as a final image when said current image is determined to be stable and said shutter button press is detected.

23. The method of claim 21, further comprising the step of checking a hold timeout timer while waiting for said shutter button press and repeating the step of capturing a current image and repeating the comparing and determining steps upon expiration of said hold timeout timer.

24. The method of claim 21, further comprising the step of waiting a predetermined image interval between image captures.

25. The method of claim 21, wherein the step of comparing compares all pixels in said current image and in said previous image.

26. The method of claim 21, wherein the step of comparing compares a predetermined sampling pattern of pixels in said current image and in said previous image.

27. The method of claim 21, wherein the step of comparing compares a predetermined region in said current image and in said previous image.

28. The method of claim 21, wherein the step of comparing compares a user-designated region in said current image and in said previous image.

29. The method of claim 21, wherein the step of comparing compares a user-designated object in said current image and in said previous image.

30. The method of claim 21, wherein the step of comparing compares a plurality of regions in said current image to a corresponding plurality of regions in said previous image, and wherein said current image is determined to be stable when all regions in said plurality of image regions are determined to be stable.